JP2002-074260

FIG. 1

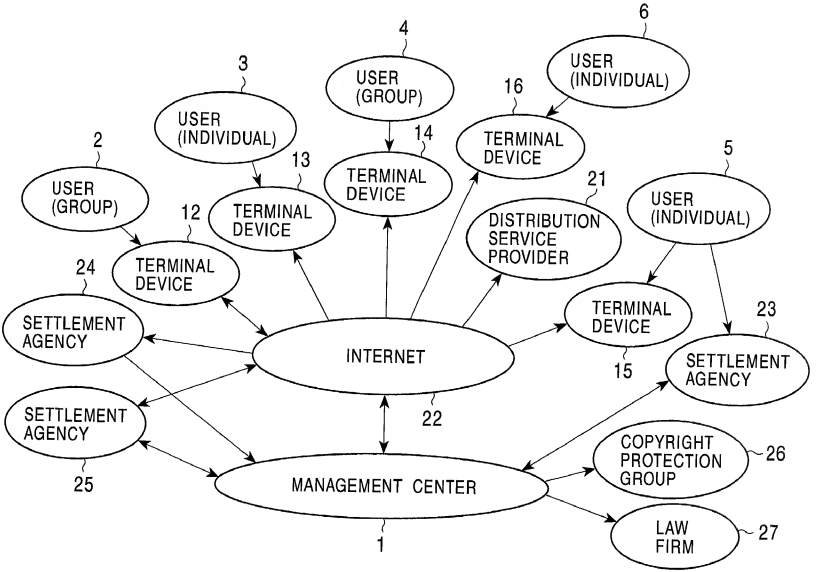


FIG. 2

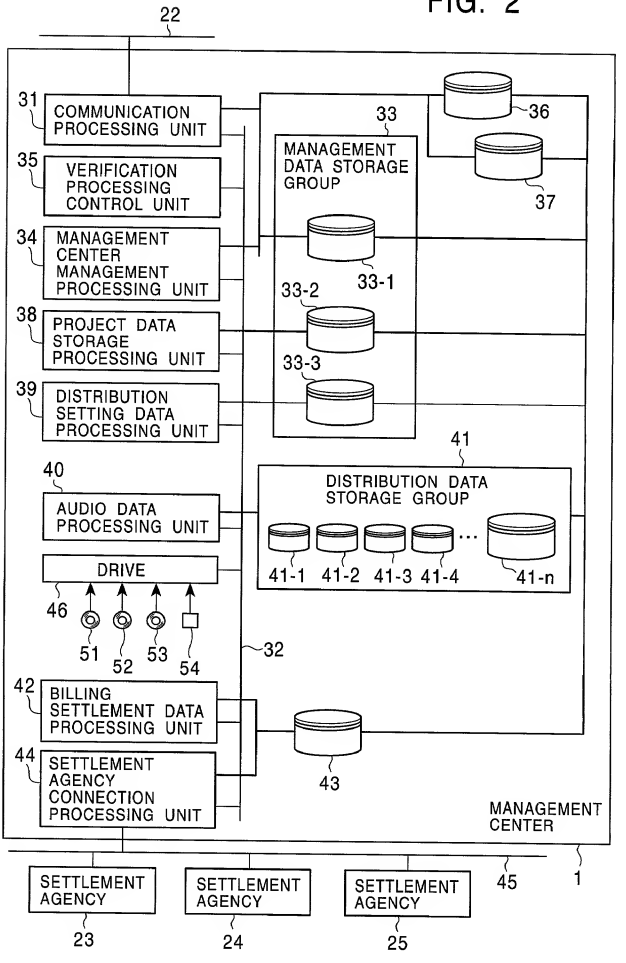

22
31
COMMUNICATION PROCESSING UNIT
35
VERIFICATION PROCESSING CONTROL UNIT
34
MANAGEMENT CENTER MANAGEMENT PROCESSING UNIT
38
PROJECT DATA STORAGE PROCESSING UNIT
39
DISTRIBUTION SETTING DATA PROCESSING UNIT
40
AUDIO DATA PROCESSING UNIT
DRIVE
46
51
52
53
54
42
BILLING SETTLEMENT DATA PROCESSING UNIT
44
SETTLEMENT AGENCY CONNECTION PROCESSING UNIT
32
33
MANAGEMENT DATA STORAGE GROUP
33-1
33-2
33-3
36
37
41
DISTRIBUTION DATA STORAGE GROUP
41-1
41-2
41-3
41-4
41-n
43
MANAGEMENT CENTER
1
45
SETTLEMENT AGENCY
23
SETTLEMENT AGENCY
24
SETTLEMENT AGENCY
25

FIG. 3

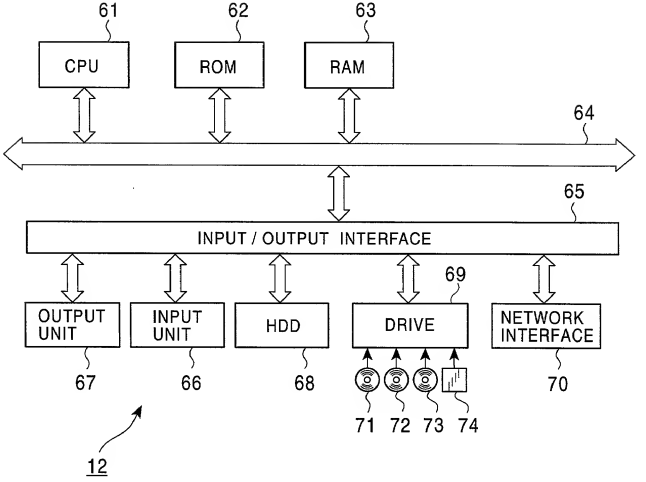

61
62
63
CPU
ROM
RAM
64
65
INPUT / OUTPUT INTERFACE
69
OUTPUT UNIT
INPUT UNIT
HDD
DRIVE
NETWORK INTERFACE
67
66
68
70
71
72
73
74
12

FIG. 4

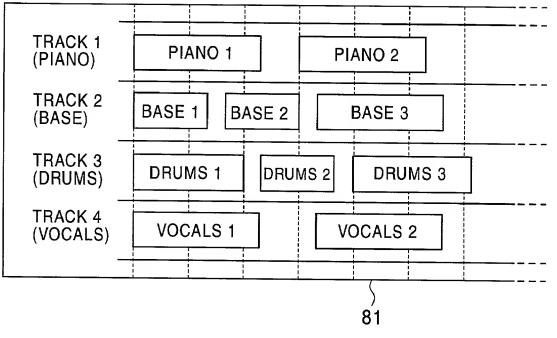
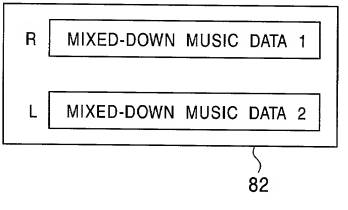

TRACK 1
(PIANO)
PIANO 1
PIANO 2
TRACK 2
(BASE)
BASE 1
BASE 2
BASE 3
TRACK 3
(DRUMS)
DRUMS 1
DRUMS 2
DRUMS 3
TRACK 4
(VOCALS)
VOCALS 1
VOCALS 2
81

FIG. 5


R
MIXED-DOWN MUSIC DATA 1
L
MIXED-DOWN MUSIC DATA 2
82

TOETEO"OTEEEEEO

FIG. 6

USER	CONTRACT FORMAT	CONTRACTING PARTY	CONTENTS OF CONTRACT			
			INDIVIDUAL/ GROUP	TRACK DATA		DOWNLOAD STEREO DATA
				DOWNLOAD	UPLOAD	
USER 2	CONTRACT FORMAT 1	MANAGEMENT CENTER	INDIVIDUAL	○	○	○
USER 3	CONTRACT FORMAT 2	MANAGEMENT CENTER	INDIVIDUAL	○	×	○
USER 4	CONTRACT FORMAT 3	MANAGEMENT CENTER	GROUP	○	×	○
USER 5	CONTRACT FORMAT 4	MANAGEMENT CENTER	INDIVIDUAL	×	×	○
USER 6	CONTRACT FORMAT 5	DISTRIBUTION SERVICE PROVIDER	INDIVIDUAL	×	×	○

FIG. 7

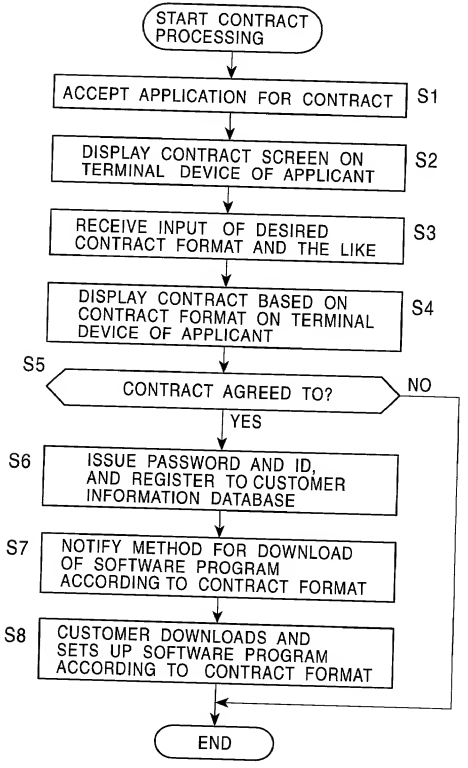

START CONTRACT PROCESSING
ACCEPT APPLICATION FOR CONTRACT
S1
DISPLAY CONTRACT SCREEN ON TERMINAL DEVICE OF APPLICANT
S2
RECEIVE INPUT OF DESIRED CONTRACT FORMAT AND THE LIKE
S3
DISPLAY CONTRACT BASED ON CONTRACT FORMAT ON TERMINAL DEVICE OF APPLICANT
S4
S5
CONTRACT AGREED TO?
NO
YES
S6
ISSUE PASSWORD AND ID, AND REGISTER TO CUSTOMER INFORMATION DATABASE
S7
NOTIFY METHOD FOR DOWNLOAD OF SOFTWARE PROGRAM ACCORDING TO CONTRACT FORMAT
S8
CUSTOMER DOWNLOADS AND SETS UP SOFTWARE PROGRAM ACCORDING TO CONTRACT FORMAT
END

FIG. 8

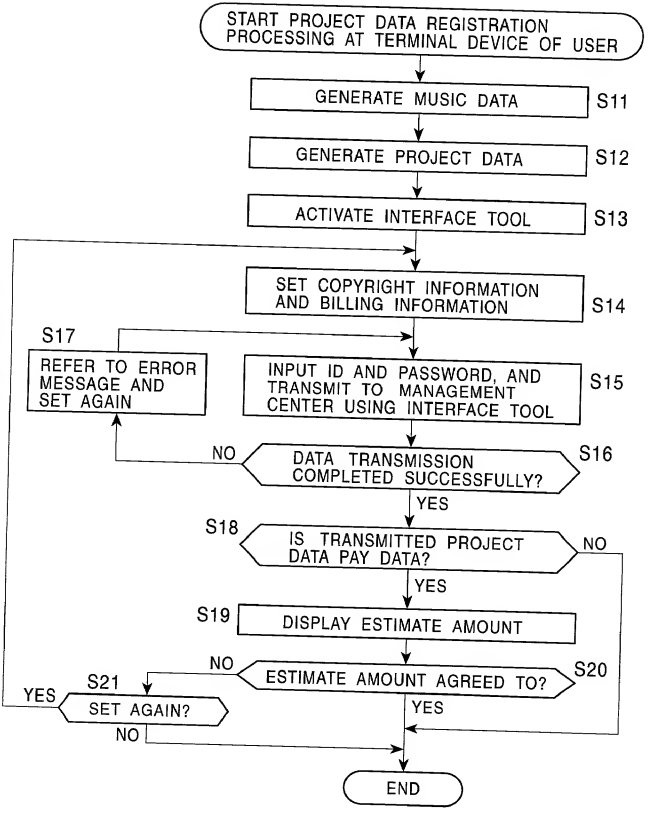

START PROJECT DATA REGISTRATION PROCESSING AT TERMINAL DEVICE OF USER
GENERATE MUSIC DATA
S11
GENERATE PROJECT DATA
S12
ACTIVATE INTERFACE TOOL
S13
SET COPYRIGHT INFORMATION AND BILLING INFORMATION
S14
S17
REFER TO ERROR MESSAGE AND SET AGAIN
INPUT ID AND PASSWORD, AND TRANSMIT TO MANAGEMENT CENTER USING INTERFACE TOOL
S15
NO
DATA TRANSMISSION COMPLETED SUCCESSFULLY?
S16
YES
S18
IS TRANSMITTED PROJECT DATA PAY DATA?
NO
YES
S19
DISPLAY ESTIMATE AMOUNT
NO
ESTIMATE AMOUNT AGREED TO?
S20
YES
S21
SET AGAIN?
YES
NO
END

FIG. 9

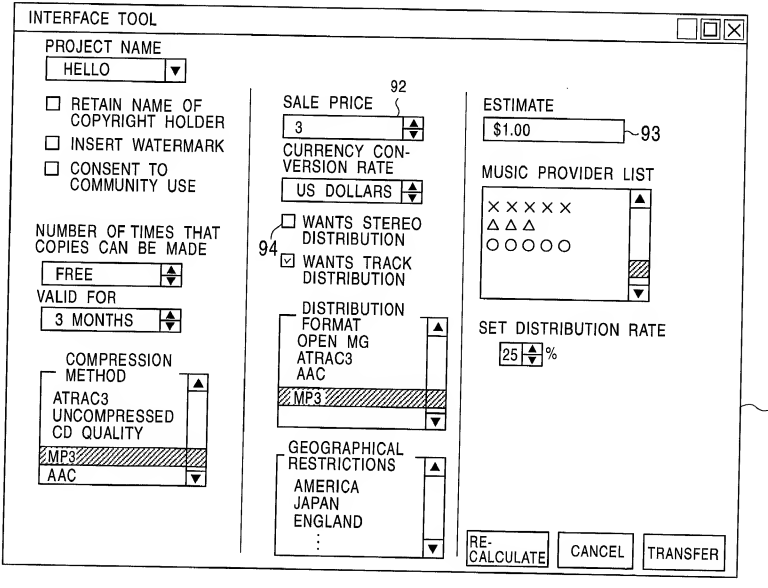

INTERFACE TOOL
PROJECT NAME
HELLO
RETAIN NAME OF COPYRIGHT HOLDER
INSERT WATERMARK
CONSENT TO COMMUNITY USE
NUMBER OF TIMES THAT COPIES CAN BE MADE
FREE
VALID FOR
3 MONTHS
COMPRESSION METHOD
ATRAC3
UNCOMPRESSED
CD QUALITY
MP3
AAC
92
SALE PRICE
3
CURRENCY CONVERSION RATE
US DOLLARS
94
WANTS STEREO DISTRIBUTION
WANTS TRACK DISTRIBUTION
DISTRIBUTION FORMAT
OPEN MG
ATRAC3
AAC
MP3
GEOGRAPHICAL RESTRICTIONS
AMERICA
JAPAN
ENGLAND
ESTIMATE
$1.00
93
MUSIC PROVIDER LIST
SET DISTRIBUTION RATE
25 %
91
RE-CALCULATE
CANCEL
TRANSFER

FIG. 10

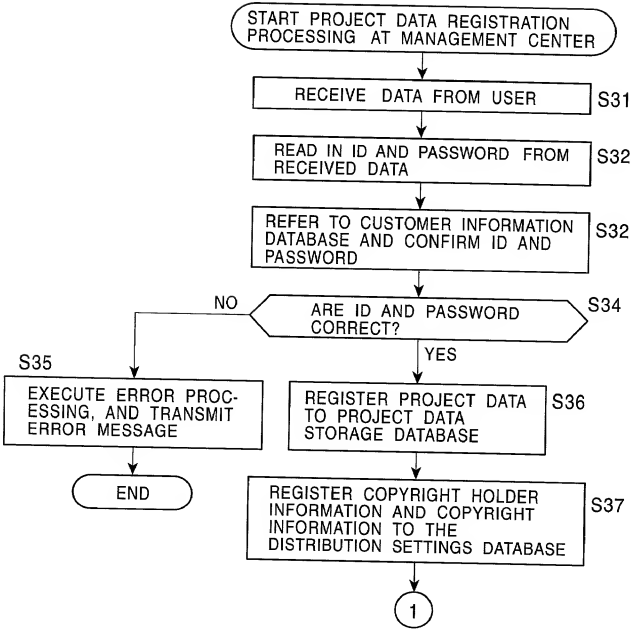

START PROJECT DATA REGISTRATION PROCESSING AT MANAGEMENT CENTER
RECEIVE DATA FROM USER
S31
READ IN ID AND PASSWORD FROM RECEIVED DATA
S32
REFER TO CUSTOMER INFORMATION DATABASE AND CONFIRM ID AND PASSWORD
S32
NO
ARE ID AND PASSWORD CORRECT?
S34
YES
S35
EXECUTE ERROR PROCESSING, AND TRANSMIT ERROR MESSAGE
REGISTER PROJECT DATA TO PROJECT DATA STORAGE DATABASE
S36
END
REGISTER COPYRIGHT HOLDER INFORMATION AND COPYRIGHT INFORMATION TO THE DISTRIBUTION SETTINGS DATABASE
S37
1

FIG. 11

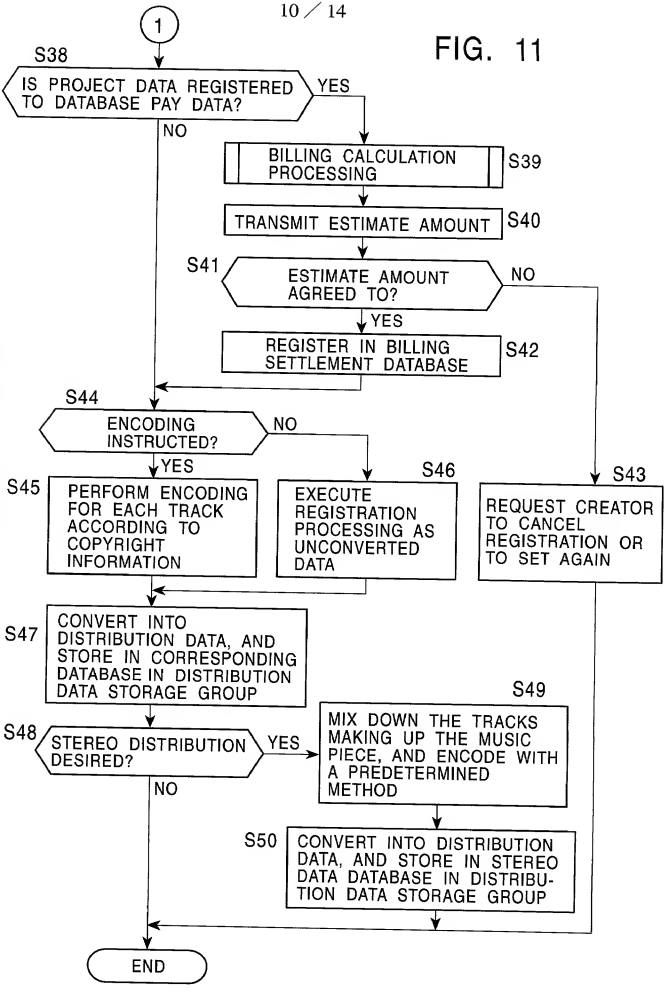

1
S38
IS PROJECT DATA REGISTERED TO DATABASE PAY DATA?
YES
NO
BILLING CALCULATION PROCESSING
S39
TRANSMIT ESTIMATE AMOUNT
S40
S41
ESTIMATE AMOUNT AGREED TO?
NO
YES
REGISTER IN BILLING SETTLEMENT DATABASE
S42
S44
ENCODING INSTRUCTED?
NO
YES
S45
PERFORM ENCODING FOR EACH TRACK ACCORDING TO COPYRIGHT INFORMATION
S46
EXECUTE REGISTRATION PROCESSING AS UNCONVERTED DATA
S43
REQUEST CREATOR TO CANCEL REGISTRATION OR TO SET AGAIN
S47
CONVERT INTO DISTRIBUTION DATA, AND STORE IN CORRESPONDING DATABASE IN DISTRIBUTION DATA STORAGE GROUP
S48
STEREO DISTRIBUTION DESIRED?
YES
NO
S49
MIX DOWN THE TRACKS MAKING UP THE MUSIC PIECE, AND ENCODE WITH A PREDETERMINED METHOD
S50
CONVERT INTO DISTRIBUTION DATA, AND STORE IN STEREO DATA DATABASE IN DISTRIBUTION DATA STORAGE GROUP
END

FIG. 12

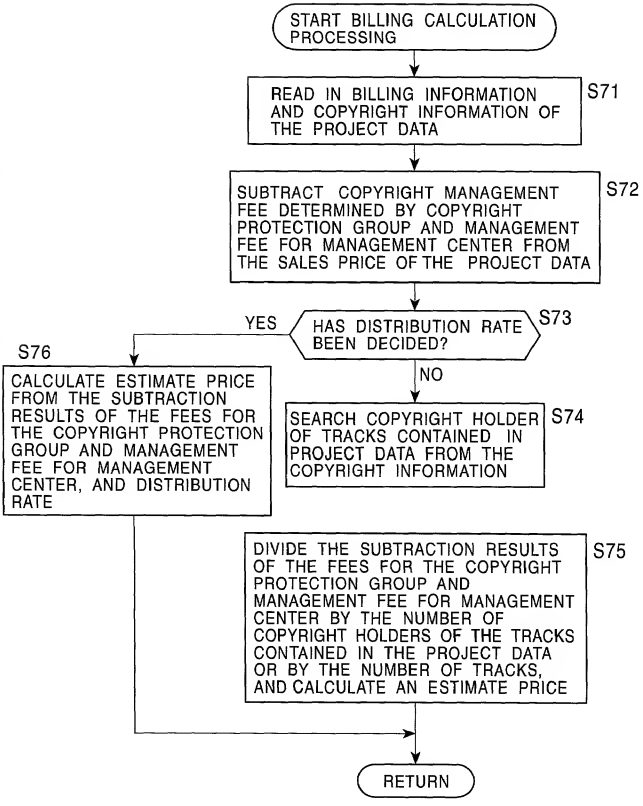

START BILLING CALCULATION PROCESSING
READ IN BILLING INFORMATION AND COPYRIGHT INFORMATION OF THE PROJECT DATA
S71
SUBTRACT COPYRIGHT MANAGEMENT FEE DETERMINED BY COPYRIGHT PROTECTION GROUP AND MANAGEMENT FEE FOR MANAGEMENT CENTER FROM THE SALES PRICE OF THE PROJECT DATA
S72
HAS DISTRIBUTION RATE BEEN DECIDED?
S73
YES
NO
S76
CALCULATE ESTIMATE PRICE FROM THE SUBTRACTION RESULTS OF THE FEES FOR THE COPYRIGHT PROTECTION GROUP AND MANAGEMENT FEE FOR MANAGEMENT CENTER, AND DISTRIBUTION RATE
SEARCH COPYRIGHT HOLDER OF TRACKS CONTAINED IN PROJECT DATA FROM THE COPYRIGHT INFORMATION
S74
DIVIDE THE SUBTRACTION RESULTS OF THE FEES FOR THE COPYRIGHT PROTECTION GROUP AND MANAGEMENT FEE FOR MANAGEMENT CENTER BY THE NUMBER OF COPYRIGHT HOLDERS OF THE TRACKS CONTAINED IN THE PROJECT DATA OR BY THE NUMBER OF TRACKS, AND CALCULATE AN ESTIMATE PRICE
S75
RETURN

FIG. 13

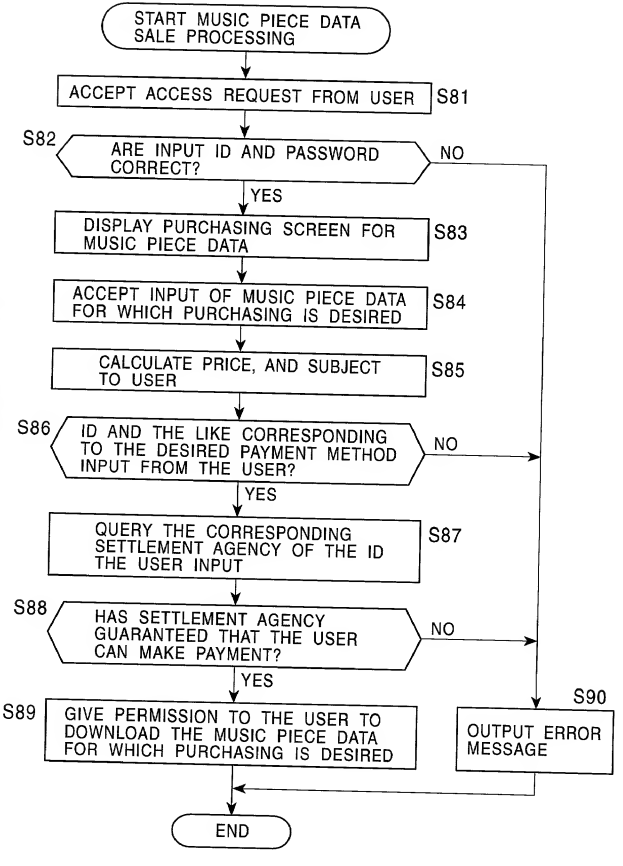

START MUSIC PIECE DATA SALE PROCESSING
ACCEPT ACCESS REQUEST FROM USER
S81
S82
ARE INPUT ID AND PASSWORD CORRECT?
NO
YES
DISPLAY PURCHASING SCREEN FOR MUSIC PIECE DATA
S83
ACCEPT INPUT OF MUSIC PIECE DATA FOR WHICH PURCHASING IS DESIRED
S84
CALCULATE PRICE, AND SUBJECT TO USER
S85
S86
ID AND THE LIKE CORRESPONDING TO THE DESIRED PAYMENT METHOD INPUT FROM THE USER?
NO
YES
QUERY THE CORRESPONDING SETTLEMENT AGENCY OF THE ID THE USER INPUT
S87
S88
HAS SETTLEMENT AGENCY GUARANTEED THAT THE USER CAN MAKE PAYMENT?
NO
YES
S89
GIVE PERMISSION TO THE USER TO DOWNLOAD THE MUSIC PIECE DATA FOR WHICH PURCHASING IS DESIRED
S90
OUTPUT ERROR MESSAGE
END

FIG. 14

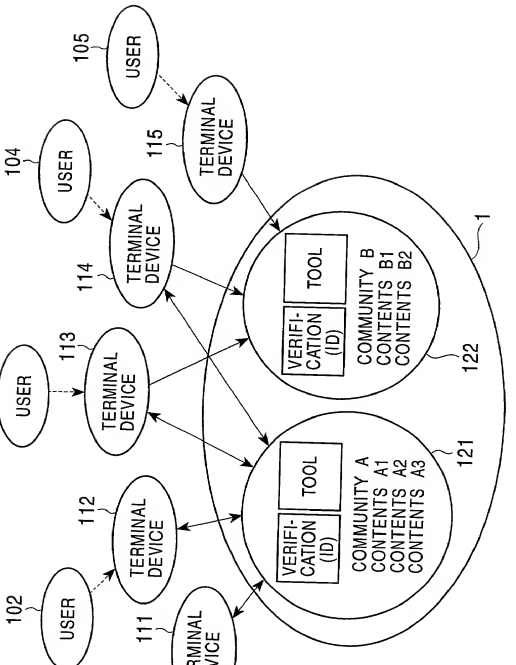
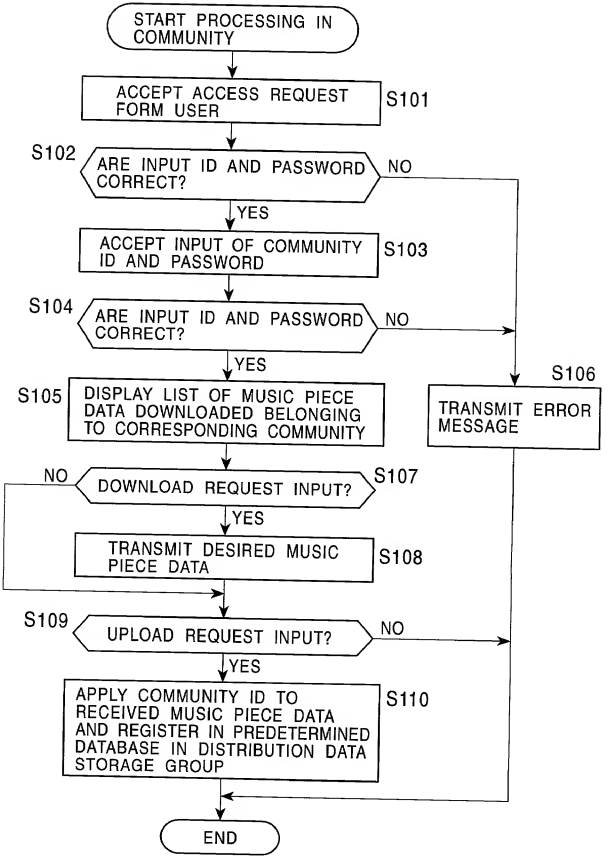

101
USER
102
USER
103
USER
104
USER
105
USER
111
TERMINAL DEVICE
112
TERMINAL DEVICE
113
TERMINAL DEVICE
114
TERMINAL DEVICE
115
TERMINAL DEVICE
VERIFI-CATION (ID)
TOOL
COMMUNITY A
CONTENTS A1
CONTENTS A2
CONTENTS A3
121
VERIFI-CATION (ID)
TOOL
COMMUNITY B
CONTENTS B1
CONTENTS B2
122
1

FIG. 15


START PROCESSING IN COMMUNITY
ACCEPT ACCESS REQUEST FORM USER
S101
S102
ARE INPUT ID AND PASSWORD CORRECT?
NO
YES
ACCEPT INPUT OF COMMUNITY ID AND PASSWORD
S103
S104
ARE INPUT ID AND PASSWORD CORRECT?
NO
YES
S105
DISPLAY LIST OF MUSIC PIECE DATA DOWNLOADED BELONGING TO CORRESPONDING COMMUNITY
S106
TRANSMIT ERROR MESSAGE
NO
DOWNLOAD REQUEST INPUT?
S107
YES
TRANSMIT DESIRED MUSIC PIECE DATA
S108
S109
UPLOAD REQUEST INPUT?
NO
YES
APPLY COMMUNITY ID TO RECEIVED MUSIC PIECE DATA AND REGISTER IN PREDETERMINED DATABASE IN DISTRIBUTION DATA STORAGE GROUP
S110
END